

**REMARKS**

Claims 1, 3-7, 12, 14-16, 19-22, 26-53, 55, and 57-60 are pending. Claims 10, 11, 13, 17, and 56 are currently canceled. Claims 36 to 53 and 55 have been withdrawn from consideration. Claims 1, 12, 16, 22, 57, and 58 are currently amended. Reconsideration of the application is requested.

**§ 112 Rejections**

Claims 1, 11, 13, 16, and 17 are rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement.

The Examiner has stated that claim 1 recites “the article comprises discrete, encapsulated reservoirs” and claim 11 which depends from claim 1 recites “the article comprises a plurality of channels”. The Specification however provides support for an article having either reservoirs or channels, not both.

Without agreeing that the rejection is proper, Applicants have canceled claims 11, 13 and 17 and amended claim 16 to depend upon claim 12. Thus there are no claims that claim both discrete encapsulated reservoirs and channels.

In summary, Applicants submit that the rejection of claims 1, 11, 13, 16, and 17 under 35 USC § 112, first paragraph, has been overcome, and that the rejection should be withdrawn.

**§ 102 Rejections**

Claims 1, 3, 4, 6, 7, 11, 13, 16, 17, 19, 20, and 21 are rejected under 35 USC § 102(b) as being anticipated by US Patent No. 2,638,430 (Mann) “Mann”.

Mann teaches a surface covering article in which an adhesive is coated onto a liner. The coated adhesive may have ridges on the surface (figures 2 and 3). A surface covering, such as a tile, is placed onto the ridged adhesive surface, presses down on the ridges and forms continuous channels between the adhesive and the tile surface. The patent office contends that these continuous channels are “discrete reservoirs” as defined in Claim 1. The continuous channels of Mann are intended for air egress and therefore are not discrete reservoirs. Mann in column 6 lines 7-9 “the continuous grooves 42 between the ridges 37 permit air to escape from under the edges of the tiles” and column 6 lines 10-15 “when the rim portions 39 of the tiles are in final position

abutting the strip 18 adequate space is still provided in the enclosed pockets 42 for slight displacement of or compression of air which may be trapped beneath individual tiles". Therefore there is no teaching in Mann of the discrete reservoirs between the structured surface of the adhesive layer and the backing.

The patent office has stated that figure 3 of Mann, shows that when reference #29 is placed on top of the adhesive it forms discrete reservoirs between the structure surface of the adhesive and the backing as claimed. The patent office has also stated that the fact that air can escape is irrelevant since Applicant is not claiming completely sealed reservoirs. Applicant's amendments stating that the discrete reservoirs are discrete, encapsulated reservoirs (as discussed on page 8, lines 5-7 of the specification where discrete reservoirs are described, "This plurality of discrete, encapsulated reservoirs compartmentalizes the encapsulated substances and minimizes communication between the contents of neighboring reservoirs within the same or different adhesive layers.") clearly demonstrates that the described reservoirs are discrete and encapsulated and not like the continuous grooves of Mann, which are designed to allow displacement of air from the grooves. Further, utilizing the American Heritage College Dictionary 3<sup>rd</sup> Edition (Houghton Mifflin, Boston, New York) 1993, the descriptions of discrete are : 1. Constituting a distinct thing. 2. Consisting of unconnected distinct parts.; and the description of encapsulated is: Enclosed by a protective coating or membrane: an encapsulated bacterium. Clearly from the description provided in the specification and the commonly understood definitions of the terms, a discrete, encapsulated reservoir is not one that permits air to escape from the edge of the tiles as described by Mann.

Further, Claim 1 has been amended to include the description "each reservoir having a void volume of less than 20 nL". Support for this amendment can be found, for example, in original claim 56. There is no teaching, suggestion, disclosure or enablement in Mann for discrete, encapsulated reservoirs with such void volumes. Instead, since Mann teaches channels formed by the continuous grooves such channels have no "void volume" rather their volumes, since they are open to the air, are essentially infinite.

Claims 3, 4, 6, 7, 16, 19, 20, and 21 each add additional limitations to claim 1. Since claim 1 is patentable over Mann for the reasons stated above, each of these claims is also patentable for at least the same reason.

The rejection of claims 1, 3, 4, 6, 7, 16, 19, 20, and 21 under 35 USC § 102(b) as being anticipated by US Patent No. 2,638,430 “Mann” has been overcome and should be withdrawn.

Claims 1, 3, 4, and 7 are rejected under 35 USC § 102(b) as being anticipated by JP Patent Publication No. 11-181367 (Hata) “Hata”.

Applicants point out that JP Patent Publication No. 11-181367 (Hata) is equivalent to PCT Publication No. WO 99/24519 which is in English and will be referred to in the reply to this rejection.

Claim 1 has been amended to include the description “each reservoir having a void volume of less than 20 nL”. There is no teaching, suggestion, disclosure or enablement in Hata that the articles formed with the protrusions of Hata would have such void volumes. In fact, on page 8 of the WO 99/24519 publication on lines 18-23, in describing the volumes of depressions formed by the protrusions, Hata states: “That is, the volume of each depression enclosed by the protrusions is preferably in the range 1-600 mm<sup>3</sup>. If the volume of the depression is less than 1 mm<sup>3</sup>, the heat shielding and vibration resistance effect will tend to be reduced,...” Since 1 mm<sup>3</sup> is equivalent to 1,000 nL, the minimum volume taught by Hata is 50 times larger than the volume presented in claim 1. Further, Hata teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed.

Claims 3, 4, and 7 each add additional limitations to claim 1. Since claim 1 is patentable over Hata for the reasons stated above, each of these claims is also patentable for at least the same reason.

The rejection of claims 1, 3, 4, and 7 under 35 USC § 102(b) as being anticipated by JP Patent Publication No. 11-181367 “Hata” has been overcome and should be withdrawn.

### **§ 103 Rejections**

Claims 5, 10, 12, 14, 15, 22, 26 and 56-60 are rejected under 35 USC § 103(a) as being unpatentable over US Patent No. 2,638,430 (Mann) “Mann”.

The Examiner has stated that Mann fails to disclose the claimed peel strength, thickness of the tape or volume of reservoirs. The Examiner goes on to state that it would have been obvious for one of ordinary skill in the art to modify Mann to have the claimed ranges.

Applicants point out that all of these claims now have the description “each reservoir having a void volume of less than 20 nL”. There is no mention of void volumes in Mann because Mann teaches in column 3 lines 15-20: “As hereinafter explained, it is desirable to provide a plurality of grooves or channels in the outer surface of the adhesive layer in order to permit the escape of air during pressing of the tile element into place.” Therefore, not only does Mann not teach discrete, encapsulated reservoirs, the grooves and channels that he does teach are continuous and therefore would necessarily have a volume much larger than 20 nL. Nor is there any teaching, suggestion or motivation to make these grooves or channels discrete or of a smaller volume as they are designed for air egress.

The rejection of claims 5, 12, 14, 15, 22, 26 and 57-60 under 35 USC § 103(a) as being unpatentable over US Patent No. 2,638,430 (Mann) “Mann” has been overcome and should be withdrawn.

Claims 5, 10, 12, 14, 15, 22, 26 and 56-60 are rejected under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) “Hata”.

The Examiner has stated that Hata fails to disclose the claimed peel strength, thickness of the tape or volume of reservoirs. The Examiner goes on to state that it would have been obvious for one of ordinary skill in the art to modify Hata to have the claimed ranges.

Applicants point out that all of these claims now have the description “each reservoir having a void volume of less than 20 nL”. Applicants further point out that there is no teaching, suggestion, disclosure or enablement in Hata that the articles formed with the protrusions of Hata would have such void volumes. In fact, on page 8 of the WO 99/24519 publication on lines 18-23, in describing the volumes of depressions formed by the protrusions, Hata states: “That is, the volume of each depression enclosed by the protrusions is preferably in the range 1-600 mm<sup>3</sup>. If the volume of the depression is less than 1 mm<sup>3</sup>, the heat shielding and vibration resistance effect will tend to be reduced,...” Since 1 mm<sup>3</sup> is equivalent to 1,000 nL, the minimum volume taught by Hata is 50 times larger than the volume presented in the present claims. Further, Hata teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed.

The rejection of claims 5, 12, 14, 15, 22, 26 and 57-60 under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) "Hata" has been overcome and should be withdrawn.

Claims 6, 20, 21 and 28-35 are rejected under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) "Hata" in view of PCT Publication WO 97/33946 (Hata) "Hata".

Applicants point out that JP Patent Publication No. 11-181367 (Hata) is equivalent to PCT Publication No. WO 99/24519 which is in English and will be referred to in the reply to this rejection.

The Examiner has stated that Hata (JP 11-181367) fails to teach a second adhesive layer having a first and second major surface wherein at least one of the first and second major surfaces is a structured surface, wherein the at least one adhesive layer and the second adhesive layer are in contact, and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured surface and the first major surface of the second adhesive layer being a structured surface and the second major surface of the second adhesive layer being a non-structured surface, and the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer.

The Examiner is utilizing the second Hata reference (WO 97/33946) which teaches in Figure 3a the lamination together of adhesive layers to supply this lack in Hata (JP 11-181367).

All of these claims are dependent upon claim 1 which has been amended to include the description "each reservoir having a void volume of less than 20 nL". There is no teaching, suggestion, disclosure or enablement in Hata (JP 11-181367) or Hata (WO 97/33946) for articles that have such void volumes. In fact, as described above, Hata (JP 11-181367) teaches volumes in the range 1-600 mm<sup>3</sup> and Hata (WO 97/33946) teaches volumes of 0.8 to 600 mm<sup>3</sup>. Further, Hata (JP 11-181367) teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed. Therefore there is no way to combine these references and obtain the present claims, nor is there any motivation to do so based upon the teachings therein.

The rejection of claims 6, 20,21 and 28-35 under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) "Hata" in view of PCT Publication WO 97/33946 (Hata) "Hata" has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application as amended is requested.

Respectfully submitted,

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Date

By: /Jeffrey M. Olofson/

Jeffrey M. Olofson, Reg. No.: 45,701

Telephone No.: 651-736-7906

Office of Intellectual Property Counsel  
3M Innovative Properties Company  
Facsimile No.: 651-736-3833